

**ABSTRACT**

In a private wireless high-speed data system and data service method, a private pDLR for handling authentication of a terminal entering a private network and call processing is arranged in a private (premises) EV-DO wireless network and session information of the corresponding terminal is received from a data location register (DLR) of the public EV-DO network and is stored in a database of the private pDLR only when the terminal entering the private EV-DO wireless network requests the call connection for the first time, and the call authentication is performed. The call processing is performed using the session information for the corresponding terminal stored in the private pDLR in when the call connection is requested from the terminal entering the private network at least two or more times.